

WHAT IS CLAIMED IS:

- 1 1. A game and home entertainment device remote control system
2 comprising:
3 a remote control having a touch pad, the touch pad generating a touch
4 pad signal in response to a gesture on the touch pad;
5 a display screen having a display area; and
6 a controller in communication with the touch pad and the display
7 screen, the controller operative to:
8 receive the touch pad signal,
9 determine whether the touch pad signal is for controlling a game or
10 for controlling a home entertainment device,
11 if the touch pad signal is for controlling a game, perform a game
12 activity in response to the touch pad signal and cause a result of the game activity
13 to be displayed on the display screen, and
14 if the touch pad signal is for controlling a home entertainment device,
15 enable a home entertainment device control function.
- 1 2. A game and home entertainment device remote control system
2 as in claim 1 wherein the display screen is mapped to the touch pad so that the
3 gesture on the touch pad is scaled correspondingly to an appropriate region of the
4 display screen.
- 1 3. A game and home entertainment device remote control system
2 as in claim 1 wherein the display screen displays a moveable object, the controller
3 further operative to proportionately position the moveable object on the display
4 screen corresponding to a location touched on the touch pad.
- 1 4. A game and home entertainment device remote control system
2 as in claim 1 wherein the touch pad is logically divided into a plurality of regions,
3 each region corresponding to one of a plurality of selectable items displayed on the
4 display screen.

1 5. A game and home entertainment device remote control system
2 as in claim 1 wherein the touch pad is divided into a plurality of regions, the
3 controller further operative to interpret at least one gesture in one of the plurality
4 of regions differently than the at least one gesture is interpreted in another of the
5 plurality of regions.

1 6. A game and home entertainment device remote control system
2 as in claim 1 wherein the controller is operative to interpret at least one gesture on
3 the touch pad based on at least one parameter programmed by a user of the system.

1 7. A game and home entertainment device remote control system
2 as in claim 1 wherein the controller is further operative to adapt the operation of the
3 touch pad to at least one operator idiosyncrasy.

1 8. A game and home entertainment device remote control system
2 as in claim 1 wherein the system offers a plurality of games, the controller further
3 operative to vary the functioning of the touch pad to fit each of the plurality of
4 games.

1 9. A game and home entertainment device remote control system
2 as in claim 1 wherein the controller is further operative to vary the functioning of
3 the touch pad to fit each of a plurality of scenarios in at least one game.

1 10. A game and home entertainment device remote control system
2 as in claim 1 wherein at least one gesture associated with at least one game may be
3 taught to the controller by a user of the system.

1 11. A game and home entertainment device remote control system
2 as in claim 1 wherein the controller is further operative to associate a sequence of
3 game control options in at least one game with a gesture on the touch pad.

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1 12. A game and home entertainment device remote control system
2 as in claim 1 wherein the controller is further operative to associate at least one
3 gesture with a particular user of the system.

1 13. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one simple linear movement.

1 14. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one free floating input.

1 15. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one gesture that is pad-to-screen mapped.

1 16. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one pressure sensitive gesture.

1 17. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one rotational control gesture.

1 18. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one velocity control gesture.

1 19. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one acceleration control gesture.

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1 20. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one alphanumeric character entry gesture.

1 21. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one complex gesture, the complex gesture having at least two elements from a set
4 consisting of straight line movements, taps, holds and circular movements.

1 22. A game and home entertainment device remote control system
2 as in claim 1 wherein the touch pad is physically divided into a plurality of regions.

1 23. A game and home entertainment device remote control system
2 as in claim 1 wherein the controller determines whether the touch pad signal is for
3 controlling a game or for controlling a home entertainment device based on a signal
4 previously received from the remote control.

1 24. A game and home entertainment device remote control system
2 as in claim 1 wherein at least a portion of the display area is mapped to the touch
3 pad.

1 25. A game and home entertainment device remote control system
2 as in claim 1 wherein the remote control comprises a trigger switch.

1 26. A remote control for controlling a home entertainment device
2 and for playing on-screen games in conjunction with a display screen, the remote
3 control comprising:

4 a touch pad generating touch pad signals in response to user contact
5 with the touch pad; and

6 a controller in communication with the touch pad, the home
7 entertainment device and the display screen, the controller mapping at least a portion
8 of the display screen to a surface area of the touch pad, the controller moving an
9 object on the display screen to a location on the display screen corresponding to a

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10 touched location on the touch pad surface area for playing at least one on-screen
11 game, the controller further recognizing gestures for controlling the home
12 entertainment device.

1 27. A remote control for a home entertainment device comprising:
2 a touch pad generating touch pad signals in response to user contact
3 with the touch pad; and
4 a controller in communication with the touch pad, the home
5 entertainment device and the display screen, the controller mapping at least a portion
6 of the display screen to a surface area of the touch pad, the controller moving an
7 object on the display screen to a location on the display screen corresponding to a
8 touched location on the touch pad surface area for playing at least one on-screen
9 game.

1 28. A remote control for controlling a home entertainment device
2 and for playing on-screen games in conjunction with a display screen, the remote
3 control comprising:
4 a touch pad generating touch pad signals in response to user contact
5 with the touch pad; and
6 a controller in communication with the touch pad, the home
7 entertainment device and the display screen, the controller recognizing gestures
8 made on the touch pad for playing at least one game and displaying results of
9 recognizing each gesture on the display screen, the controller further recognizing
10 gestures made on the touch pad for controlling the home entertainment device.

1 29. A method of remotely controlling a home entertainment device
2 comprising:
3 receiving at least one gesture on a touch pad, the touch pad remote
4 from the home entertainment device;
5 determining whether the at least one received gesture was made for
6 controlling the home entertainment device or for playing a game;

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7 if the at least one gesture was made for controlling the home
8 entertainment device, generating at least one control signal for the home
9 entertainment device based on the at least one received gesture; and
10 if the at least one gesture was made for playing a game, performing
11 a game activity based on the at least one received gesture and displaying the results
12 of the performed game activity on a display screen.

1 30. A method of remotely controlling a home entertainment device
2 as in claim 29 wherein the touch pad is part of a remote control device.

1 31. A method of remotely controlling a home entertainment device
2 as in claim 30 wherein the determination of whether the at least one received gesture
3 was made for controlling the home entertainment device or for playing the game is
4 based on at least one input previously received from the remote control.

1 32. A method of remotely controlling a home entertainment device
2 as in claim 29 comprising the mapping at least a portion of the display screen
3 to the touch pad so that the at least one gesture received on the touch pad is scaled
4 correspondingly to the at least a portion of the display screen.

1 33. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising logically dividing the touch pad into a plurality of
3 regions, each region corresponding to one of a plurality of selectable items displayed
4 on the display screen.

1 34. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising dividing the touch pad into a plurality of regions
3 and interpreting at least one gesture in one of the plurality of regions differently than
4 the at least one gesture is interpreted in another of the plurality of regions.

1 35. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising interpreting at least one gesture on the touch pad
3 based on at least one parameter programmed by a user of the system.

1 36. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising adapting the operation of the touch pad to at least
3 one operator idiosyncrasy.

1 37. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising varying the functioning of the touch pad to fit each
3 of a plurality of games.

1 38. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising learning at least one gesture associated with the
3 game taught by a user of the touch pad.

1 39. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising associating at least one gesture with a particular
3 user of the system.

1 40. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing simple linear movement.

1 41. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing free floating input.

1 42. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing pad-to-screen mapping.

1 43. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing a pressure sensitive gesture.

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1 44. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing a rotational control gesture.

1 45. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing a velocity control gesture.

1 46. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing an acceleration control gesture.

1 47. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing an alphanumeric character entry gesture..

1 48. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing a complex gesture, the complex gesture having at
4 least two elements from a set consisting of straight line movements, taps, holds and
5 circular movements.